

**83–628    Testing vacuum switch for refrigerant compressor or vacuum switch (main switch) and switchover valves**

**Special tool**

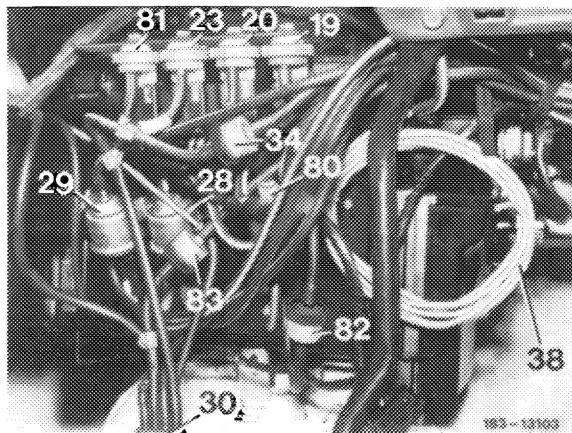
Tester for vacuum systems

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**a) Testing vacuum switch.**

1 Remove center console (68–200).

- 19 Vacuum switch (main switch, green)
- 20 Vacuum switch (refrigerant compressor, yellow)
- 23 Vacuum switch for refrigerant compressor (at "BI-LEVEL" only)
- 28 Switchover valve legroom flaps
- 29 Switchover valve (fresh air-recirculated air flap)
- 34 Check valve
- 38 Specified leak point
- 80 Switchover valve "BI-LEVEL" (at "DEF")
- 81 Vacuum switch (at "BI-LEVEL" only)
- 82 Check valve
- 83 Check valve



2 Pull vacuum line from vacuum switch (19, 20, 23 and 81) and connect tester.

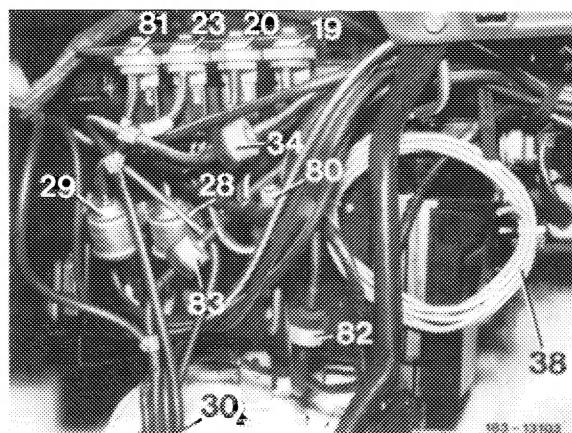
3 Connect ohmmeter to vacuum switch (19, 20, 23 and 81).

4 Evacuate vacuum switch. Vacuum switch (19) closes at 175 mbar vacuum (0.18 atu), vacuum switches (20, 23 and 81) at 78.5 mbar vacuum (0.08 atu). Ohmmeter indicates passage.

**b) Testing switchover valves (28 and 29) for operation and leaks**

5 Remove vacuum lines and electric plug from switchover valve (28, 29 or 80).

- 19 Vacuum switch (main switch, green)
- 20 Vacuum switch (refrigerant compressor, yellow)
- 23 Vacuum switch for refrigerant compressor (at "BI-LEVEL" only)
- 28 Switchover valve legroom flaps
- 29 Switchover valve (fresh air-recirculated air flap)
- 34 Check valve
- 38 Specified leak point
- 80 Switchover valve "BI-LEVEL" (at "DEF")
- 81 Vacuum switch (at "BI-LEVEL" only)
- 82 Check valve
- 83 Check valve



6 Connect tester to upper connection of switchover valve (28 and 29) and evacuate.

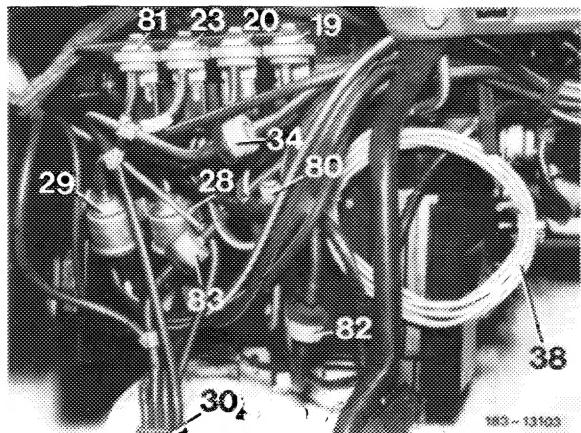
7 If gauge shows a pressure increase, switchover valve is leaking.

8 Energize switchover valve. Switchover valve opens, readout on gauge drops.

c) Testing switchover valve (80) for operation and leaks

9 Remove black vacuum line and electric plug from switchover valve (80).

- 19 Vacuum switch (main switch, green)
- 20 Vacuum switch (refrigerant compressor, yellow)
- 23 Vacuum switch for refrigerant compressor (at "BI-LEVEL" only)
- 28 Switchover valve legroom flaps
- 29 Switchover valve (fresh air-recirculated air flap)
- 34 Check valve
- 38 Specified leak point
- 80 Switchover valve "BI-LEVEL" (at "DEF")
- 81 Vacuum switch (at "BI-LEVEL" only)
- 82 Check valve
- 83 Check valve



10 Energize switchover valve.

11 Connect tester to switchover valve connection E and evacuate.

12 If gauge shows pressure increase, switchover valve is leaking and should be replaced.

13 Install center console (68–200).